

Work Order ID 78510

January-10-12 1:44:48 PM

HA

78510

Page 1

Item ID: D4410-041

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Co-Pilot Collective Head Assembly (205)

Start Date: 1/10/12

Start Qty: 1.00

1

Cust Item ID:

Required Date: 1/20/12

Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D4410

A

110

--Weld per dwg A/R Aluminum rod Batch: *M114514* 0.00

110

Large Fab

Memo

0.00

Large Fab

WELD D4410-7 & D4410-1 AS PER DWG

12-1-11

(X)

120

QC5- Inspect part completeness to step on W/O

0.00

120

QC

Memo

0.00

Quality Control

8/26/11

(X)

130

QC9- Inspect visual per QSI004- Fusion Welds

0.00

130

QC

Memo

0.00

Quality Control

1 0 BE 12-01-11

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Page 2

January-10-12 1:44:48 PM

Item ID: D4410-041

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Co-Pilot Collective Head Assembly (205)

Start Date: 1/10/12 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 1/20/12 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170 *170* Outsource4 Outsource process - Anodize	Outsource process-Anodize per QSI017 4.1.10.1 Memo Issue P/O: <i>W/A</i> Black Anodize as per Dwg D4410	0.00 0.00							
180 *180* Packaging Packaging	Receive & Inspect for Damage & Mat'l Certs Memo	0.00 0.00							
190 *190* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00							

Work Order ID 78510***78510***

Page 3

January-10-12 1:44:48 PM

Item ID: D4410-041

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Co-Pilot Collective Head Assembly (205)

Start Date: 1/10/12 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 1/20/12 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:

Run Start ***NR1***

QC: Date: SPC (Y/N): Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
200		0.00							
200									
Small Fab	Memo	0.00							
Small Fab	ASSEMBLE AS PER DWG, RE-PASS HELICOIL TAP IN THREADS								
	<i>NA</i>								
210	QC5- Inspect part completeness to step on W/O	0.00							
210									
QC	Memo	0.00							
Quality Control									
220	Identify as per dwg & Stock Location: <i>SIW</i>	0.00							
220									
Packaging	Memo	0.00							
Packaging	<i>FLAi</i>								

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January-10-12 1:44:48 PM

Item ID: D4410-041

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Co-Pilot Collective Head Assembly (205)

Start Date: 1/10/12

Start Qty: 1.00

1

Cust Item ID:

Required Date: 1/20/12

Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

230

QC21- Final Inspection - Work Order Release

0.00

230

QC

Memo

0.00

Quality Control

change to HAI

mf
12-02-08

Picklist Print

January-10-12 1:44:48 PM

Page 1

Work Order ID: 78510

Parent Item: D4410-041

Parent Item Name: Co-Pilot Collective Head Assembly (205)

Start Date: 1/10/12

Required Date: 1/20/12

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A NEW ISSUE 11-11-02 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4410-1 Co-Pilot Collective Head		Manufactured	No				Each	2.0000					
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST139F		2							
				76531		2							
D4410-7 Conduit		Manufactured	No				Each	1.0000					
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				st139g		1							
				78562X		1							
D4410-9 Trigger		Manufactured	No				Each	0.0000					
90296A108 Heli-Coil Insert		Purchased	No				Each	15.0000					
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				cnc		15							
				120040		15							
AN565F8H7 Set Screw		Purchased	No				Each	5.0000					
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST349		5							
				119849		5							
MS20253-1-65 Pin		Purchased	No				Each	0.0000					
MS21042L08 Nut		Purchased	No				Each	394.0000					
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST300		394							
				120071		94							
				120142		300							

EL 12-1-11

EL 12-1-11

1

4

1

1

1

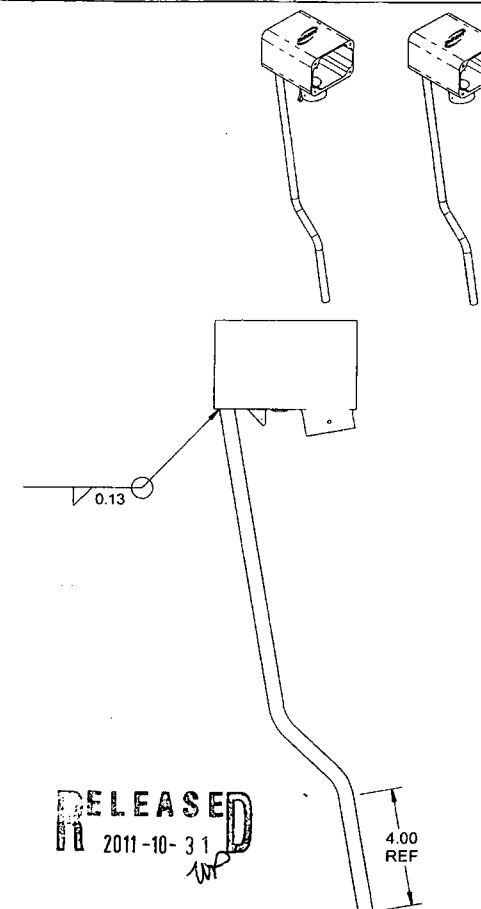
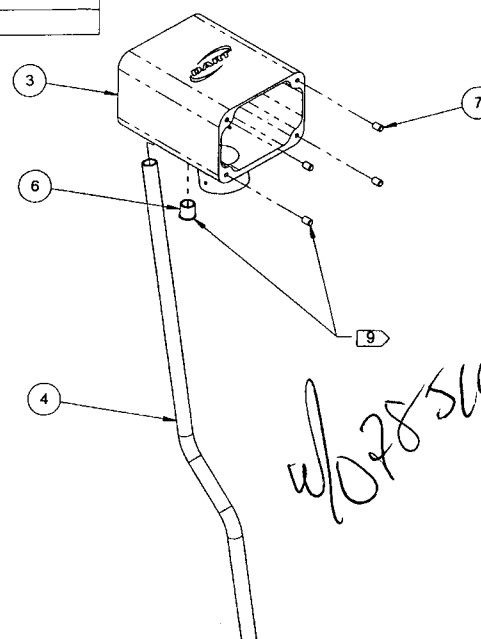
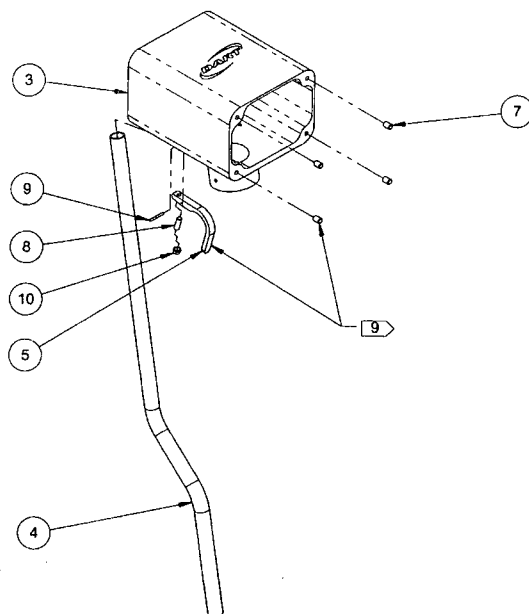
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EP 12/01/17

EP 12/01/17

EP 12/01/17

ITEM NO.	QTY. -041	QTY. -043	PART NUMBER	DESCRIPTION
1	X		D4410-041	CO-PILOT COLLECTIVE HEAD ASSEMBLY (205)
2		X	D4410-043	CO-PILOT COLLECTIVE HEAD ASSEMBLY (212)
3	1	1	D4410-1	CO-PILOT COLLECTIVE HEAD
4	1	1	D4410-7	CONDUIT
5	1		D4410-9	TRIGGER
6		1	D4413-1	DOME PLUG
7	4	4	90296A108	HELI-COIL INSERT (6-32 X 0.276)
8	1		AN565F8H7	SETSCREW
9	1		MS20253-1-65	PIN
10	1		MS21042L08	NUT



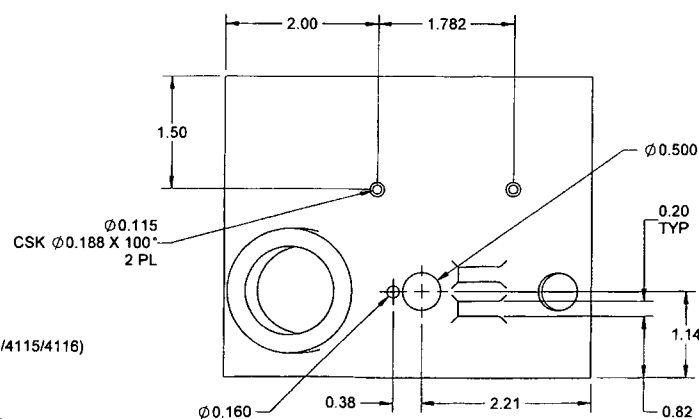
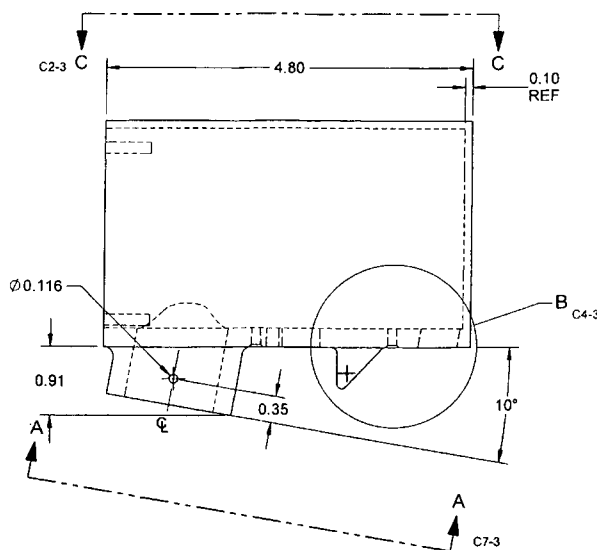
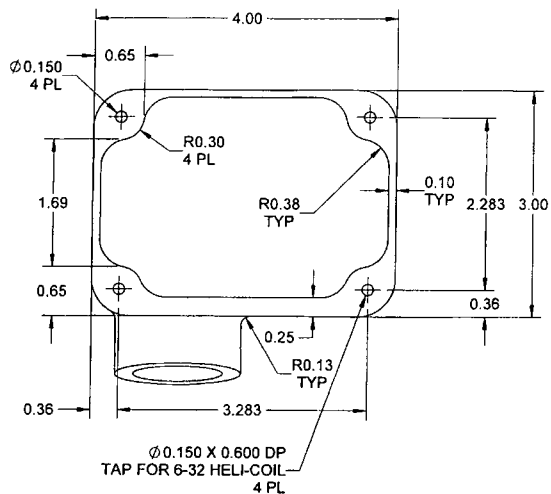
D4410-041 CO-PILOT COLLECTIVE HEAD ASSEMBLY (205)

D4410-043 CO-PILOT COLLECTIVE HEAD ASSEMBLY (212)

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2 AFTER WELDING
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 1.64 lbs
- 8) WELDING: PER DART QSI 004.
- 9) INSTALL AFTER ANODIZING

A	NEW ISSUE	DC	11.06.06
REV.	DESCRIPTION	BY	DATE
DESIGN	DC	DART AEROSPACE USA, INC.	
DRAWN	DC	KENT, WA	
CHECKED	DC	DRAWING NO.	REV. A
MFG. APPR.	DC	D4410	SHEET 1 OF 7
APPROVED	DC	TITLE	SCALE
DE APPR.	DC	CO-PILOT COLLECTIVE HEAD	NTS
DATE	11.06.06	COPYRIGHT © 2011 BY DART AEROSPACE USA, INC.	



NOTES:

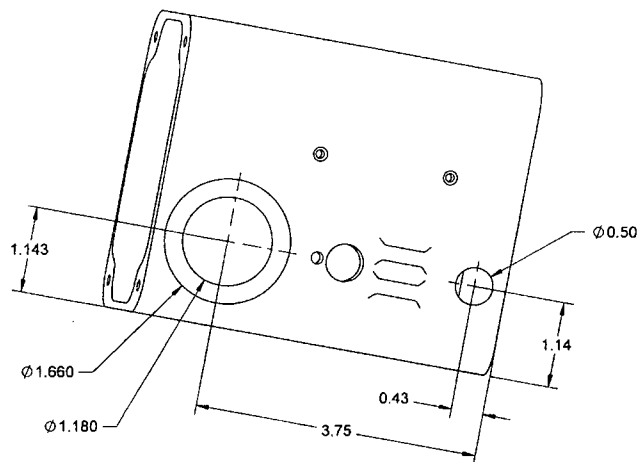
- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221
REF. DART SPEC. M6061T6B4.000X3.000
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 1.50 lbs

D4410-1 CO-PILOT COLLECTIVE HEAD

DESIGN	BC	DART AEROSPACE USA, INC.	
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CHECKED	BC	DRAWING NO.	REV. A
MFG. APPR.	BC	D4410	SHEET 2 OF 7
APPROVED	BC	TITLE	SCALE
DE APPR.	BC	CO-PILOT COLLECTIVE HEAD NTS	
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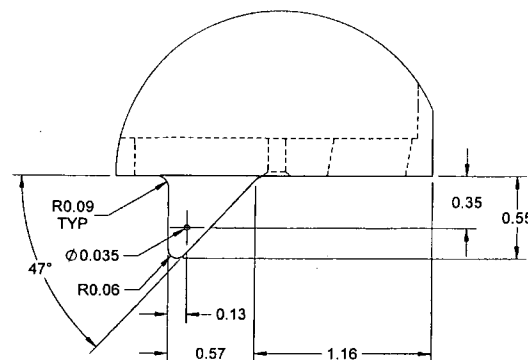
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2011-11-31
MD



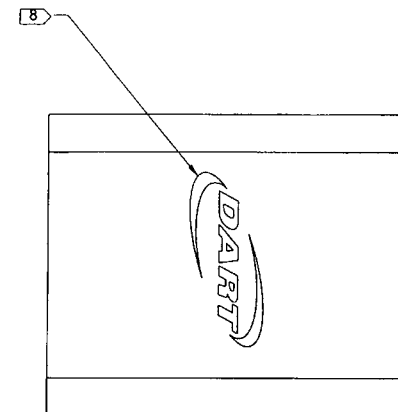
**VIEW A-A
SCALE 1X**

C5-2



**DETAIL B
SCALE 2X**

C4-2



**VIEW C-C
SCALE 1X**

D4-2

**D4410-1 CO-PILOT COLLECTIVE HEAD
DETAIL VIEWS**

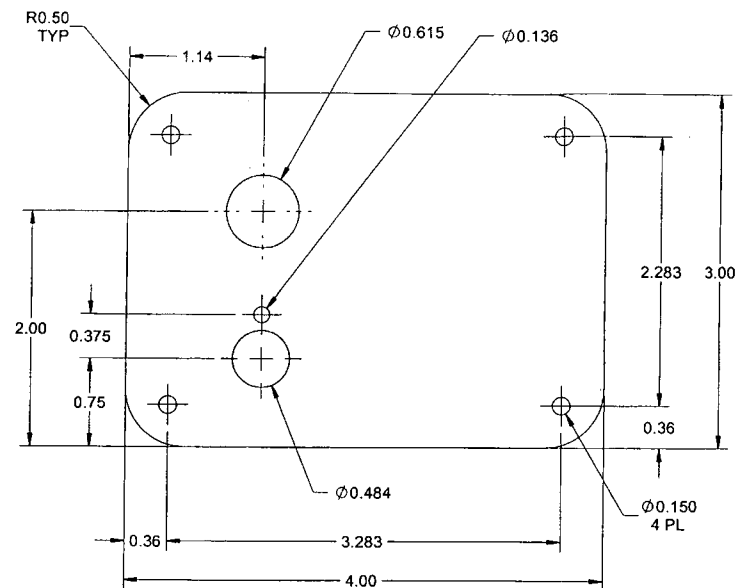
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: N/A
- 8) ENGRAVE "DART" LOGO AS SHOWN 0.003 - 0.005 DP.

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DE APPR.	DC	CO-PILOT COLLECTIVE HEAD	NTS
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2011-10-31



D4410-3 FACE PLATE

NOTES:

1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET, 0.040 THK
 QQ-A-250/11 OR AMS-QQ-A-250/11
 OR AMS 4025 OR AMS 4027
 OR ASTM B209

REF. DART SPEC. M6061T6S.040

2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

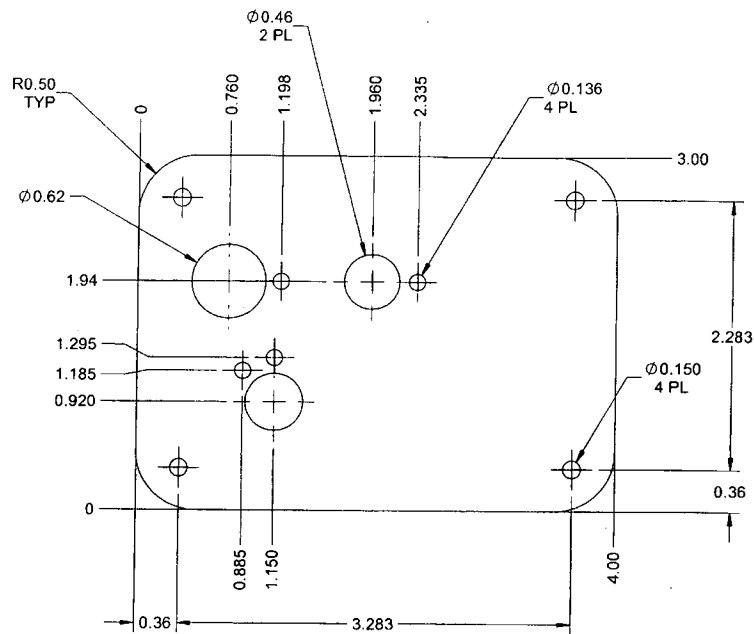
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1

7) WEIGHT: 0.04 lbs

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MFG. APPR.	DC	D4410	SHEET 4 OF 7
APPROVED	DC	TITLE	SCALE
DE APPR.	DC	CO-PILOT COLLECTIVE HEAD	NTS
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D4410-5 FACE PLATE

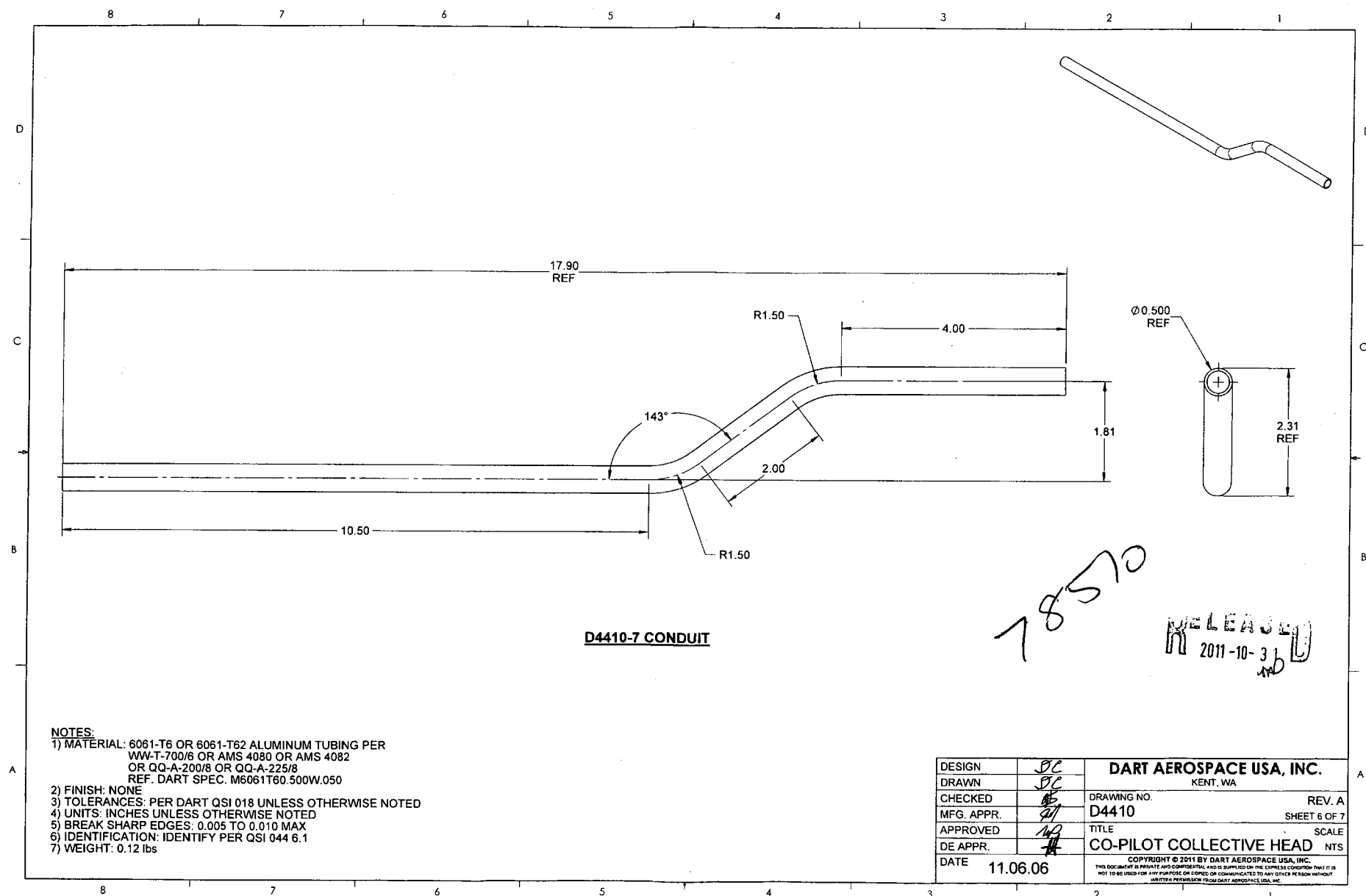
NOTES:

- 1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET, 0.040 THK
QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR AMS 4027
OR ASTM B209
REF. DART SPEC. M6061T6S.040
- 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.04 lbs

DESIGN	BC	DART AEROSPACE USA, INC.	
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MFG. APPR.	BC	D4410	SHEET 5 OF 7
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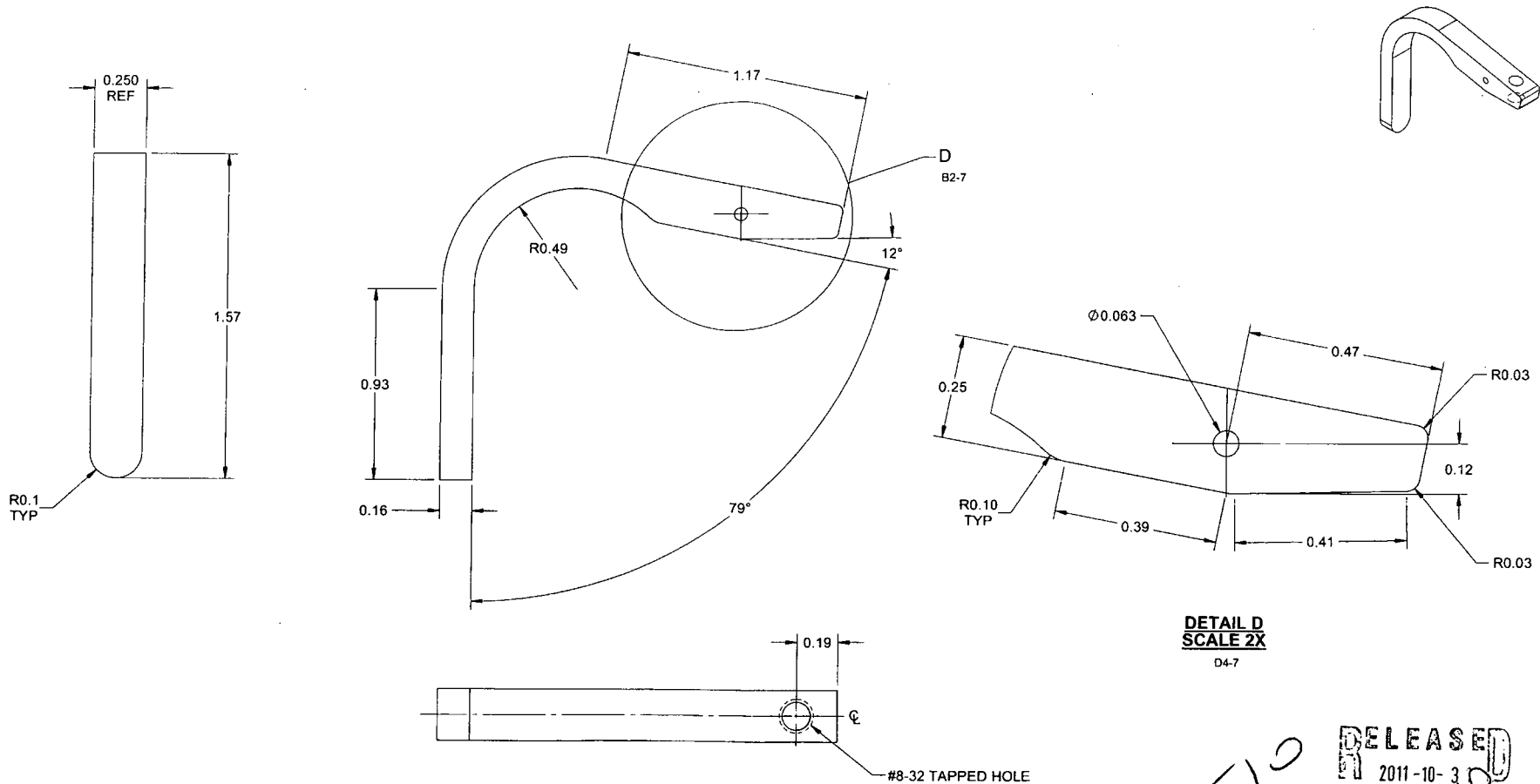
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2011-10-31
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 2011-10-31

8 7 6 5 4 3 2 1



DETAIL D
SCALE 2X
D4-7

D4410-9 TRIGGER

NOTES:

- 1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET, 0.250 THK
QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR AMS 4027
OR ASTM B209
REF. DART SPEC. M6061T6S.250
- 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.01 lbs

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2011-10-30

DESIGN	SC	DART AEROSPACE USA, INC. KENT, WA	
DRAWN	SC		
CHECKED	AS	DRAWING NO.	REV. A
MFG. APPR.	2/1	D4410	SHEET 7 OF 7
APPROVED	NO	TITLE	SCALE
DE APPR.	H	CO-PILOT COLLECTIVE HEAD	NTS
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